

NISTTech

ELECTROLESS INK AND PROCESS FOR PRINTING A SOLID METAL STRUCTURE

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Abstract

<p>The invention details a new approach to printing solid metal structures using ";Additive Manufacturing"; techniques. While traditional inks used in printable additive manufacturing processes use nanoparticles to print metal structures, this invention uses Electroless Deposition chemistries consisting of a metal ion (M+) and a reducing agent (R-) and possibly a catalyst material (either nanoparticles or a suitable chemical). The ink is printed onto a substrate held a suitable temperature so that the metal ions (M+) are reduced by the reducing agent (R-) to form a solid metal structure or film.</p>

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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